



PATENT

Attorney Docket No.: DIVER1370-6

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Short and Kretz Art Unit: 1761
Application No.: 09/777,566 Examiner: Unassigned
Filed: February 5, 2001
Title: RECOMBINANT BACTERIAL PHYTASES AND USES THEREOF

Commissioner for Patents
Washington, D.C. 20231

STATEMENT UNDER 37 C.F.R. §§ 1.821(f) and (g):

Sir:

I hereby state, as required by 37 C.F.R. § 1.821(f), that the information recorded in computer readable form is identical to the written sequence listing.

I hereby state that the submission, filed in accordance with 37 C.F.R. § 1.821 (g), herein does not include new matter.

Respectfully submitted,

Date: 6/7/01

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4365 Executive Drive, Suite 1600
San Diego, CA 92121-2189

Customer Number: 28213

CERTIFICATION UNDER 37 CFR §1.8	
I hereby certify that the documents referred to as enclosed herein are being deposited with the United States Postal Service as first class mail on this date, <u>6-7-01</u> , in an envelope addressed to: Commissioner for Patents, Washington, D.C. 20231.	
<u>Lisa A. Haile</u>	
Name of Person Submitting Paper	
Signature <u>[Signature]</u>	Date <u>6-7-01</u>



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Applicant: Short and Kretz
Application No.: 09/777,566
Filed: February 5, 2001
Title: RECOMBINANT BACTERIAL PHYTASES AND USES THEREOF

Art Unit: 1761
Examiner: Unassigned

Commissioner for Patents
Washington, D.C. 20231

VERIFIED STATEMENT UNDER 37 C.F.R. § 1.821(f)

Sir:

I, Mikhail Bayley, declare that I personally prepared the paper and the computer-readable copies of the Sequence Listing filed herewith in the above-entitled case and that the content of both is the same.

I further declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of The United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Date: 05/21/2001

Mikhail Bayley
Mikhail Bayley

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Customer Number: 28213

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JUN 14 2001
TC 1700 MAIL ROOM

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Name of Person Mailing Paper	<u>Gray Cary Ware & Freidenrich LLP</u>
Signature	<u>[Signature]</u>
Date	<u>6-7-01</u>



244

SEQUENCE LISTING

<110> DIVERSA CORPORATION
SHORT, Jay
KRETZ, Keith

<120> RECOMBINANT BACTERIAL PHYTASES AND USES THEREOF

<130> DIVER1370-6

<140> US 09/777,566
<141> 2001-02-05

<150> US 09/318,528
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<150> US 09/291,931
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ccg caa tct gca ttc gct cag agt gag ccg gag ctg aag ctg gaa agt
Pro Gln Ser Ala Phe Ala Gln Ser Glu Pro Glu Leu Lys Leu Glu Ser
20 25 30

gtg gtg att gtc agt cgt cat ggt gtg cgt gct cca acc aag gcc acc 144
Val Val Ile Val Ser Arg His Gly Val Arg Ala Pro Thr Lys Ala Thr
35 40 45

caa ctg atg cag gat gtc acc cca gac gca tgg cca acc tgg ccg gta 192
Gln Leu Met Gln Asp Val Thr Pro Asp Ala Trp Pro Thr Trp Pro Val
50 55 60

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aaa ctg ggt tgg ctg aca ccg cgn ggt ggt gag cta atc gcc tat ctc Lys Leu Gly Trp Leu Thr Pro Arg Gly Gly Glu Leu Ile Ala Tyr Leu 65 70 75 80	240
gga cat tac caa cgc cag cgt ctg gta gcc gac gga ttg ctg gcg aaa Gly His Tyr Gln Arg Gln Arg Leu Val Ala Asp Gly Leu Leu Ala Lys 85 90 95	288
aag ggc tgc ccg cag tct ggt cag gtc gcg att att gct gat gtc gac Lys Gly Cys Pro Gln Ser Gly Gln Val Ala Ile Ile Ala Asp Val Asp 100 105 110	336
gag cgt acc cgt aaa aca ggc gaa gcc ttc gcc gcc ggg ctg gca cct Glu Arg Thr Arg Lys Thr Gly Glu Ala Phe Ala Ala Gly Leu Ala Pro 115 120 125	384
gac tgt gca ata acc gta cat acc cag gca gat acg tcc agt ccc gat Asp Cys Ala Ile Thr Val His Thr Gln Ala Asp Thr Ser Ser Pro Asp 130 135 140	432
ccg tta ttt aat cct cta aaa act ggc gtt tgc caa ctg gat aac gcg Pro Leu Phe Asn Pro Leu Lys Thr Gly Val Cys Gln Leu Asp Asn Ala 145 150 155 160	480
aac gtg act gac gcg atc ctc agc agg gca gga ggg tca att gct gac Asn Val Thr Asp Ala Ile Leu Ser Arg Ala Gly Gly Ser Ile Ala Asp 165 170 175	528
ttt acc ggg cat cgg caa acg gcg ttt cgc gaa ctg gaa cgg gtg ctt Phe Thr Gly His Arg Gln Thr Ala Phe Arg Glu Leu Glu Arg Val Leu 180 185 190	576
aat ttt ccg caa tca aac ttg tgc ctt aaa cgt gag aaa cag gac gaa Asn Phe Pro Gln Ser Asn Leu Cys Leu Lys Arg Glu Lys Gln Asp Glu 195 200 205	624
agc tgt tca tta acg cag gca tta cca tgc gaa ctc aag gtg agc gcc Ser Cys Ser Leu Thr Gln Ala Leu Pro Ser Glu Leu Lys Val Ser Ala 210 215 220	672
gac aat gtc tca tta acc ggt gcg gta agc ctc gca tca atg ctg acg Asp Asn Val Ser Leu Thr Gly Ala Val Ser Leu Ala Ser Met Leu Thr 225 230 235 240	720
gag ata ttt ctc ctg caa caa gca cag gga atg ccg gag ccg ggg tgg Glu Ile Phe Leu Leu Gln Gln Ala Gln Gly Met Pro Glu Pro Gly Trp 245 250 255	768
gga agg atc acc gat tca cac cag tgg aac acc ttg cta agt ttg cat Gly Arg Ile Thr Asp Ser His Gln Trp Asn Thr Leu Leu Ser Leu His 260 265 270	816
aac gcg caa ttt tat ttg cta caa cgc acg cca gag gtt gcc cgc agc Asn Ala Gln Phe Tyr Leu Leu Gln Arg Thr Pro Glu Val Ala Arg Ser 275 280 285	864
cgc gcc acc ccg tta ttg gat ttg atc atg gca gcg ttg acg ccc cat Arg Ala Thr Pro Leu Leu Asp Leu Ile Met Ala Ala Leu Thr Pro His 290 295 300	912
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Pro Pro Gln Lys Gln Ala Tyr Gly Val Thr Leu Pro Thr Ser Val Leu
305                               310                               315                               320

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Phe Ile Ala Gly His Asp Thr Asn Leu Ala Asn Leu Gly Gly Ala Leu
                               325                               330                               335

gag ctc aac tgg acg ctt ccc ggt cag ccg gat aac acg ccg cca ggt      1056
Glu Leu Asn Trp Thr Leu Pro Gly Gln Pro Asp Asn Thr Pro Pro Gly
                               340                               345                               350

ggg gaa ctg gtg ttt gaa cgc tgg cgt cgg cta agc gat aac agc cag      1104
Gly Glu Leu Val Phe Glu Arg Trp Arg Arg Leu Ser Asp Asn Ser Gln
                               355                               360                               365

tgg att cag gtt tgc ctg gtc ttc cag act tta cag cag atg cgt gat      1152
Trp Ile Gln Val Ser Leu Val Phe Gln Thr Leu Gln Gln Met Arg Asp
                               370                               375                               380

aaa acg ccg ctg tca tta aat acg ccg ccc gga gag gtg aaa ctg acc      1200
Lys Thr Pro Leu Ser Leu Asn Thr Pro Pro Gly Glu Val Lys Leu Thr
                               385                               390                               395                               400

ctg gca gga tgt gaa gag cga aat gcg cag ggc atg tgt tgc ttg gca      1248
Leu Ala Gly Cys Glu Glu Arg Asn Ala Gln Gly Met Cys Ser Leu Ala
                               405                               410                               415

ggg ttt acg caa atc gtg aat gaa gca cgc ata ccg gcg tgc agt ttg      1296
Gly Phe Thr Gln Ile Val Asn Glu Ala Arg Ile Pro Ala Cys Ser Leu
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Val Val Ile Val Ser Arg His Gly Val Arg Ala Pro Thr Lys Ala Thr
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Gln Leu Met Gln Asp Val Thr Pro Asp Ala Trp Pro Thr Trp Pro Val

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50

55

60

Lys Leu Gly Trp Leu Thr Pro Arg Gly Gly Glu Leu Ile Ala Tyr Leu
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Gly His Tyr Gln Arg Gln Arg Leu Val Ala Asp Gly Leu Leu Ala Lys
 85 90 95

Lys Gly Cys Pro Gln Ser Gly Gln Val Ala Ile Ile Ala Asp Val Asp
 100 105 110

Glu Arg Thr Arg Lys Thr Gly Glu Ala Phe Ala Ala Gly Leu Ala Pro
 115 120 125

Asp Cys Ala Ile Thr Val His Thr Gln Ala Asp Thr Ser Ser Pro Asp
 130 135 140

Pro Leu Phe Asn Pro Leu Lys Thr Gly Val Cys Gln Leu Asp Asn Ala
 145 150 155 160

Asn Val Thr Asp Ala Ile Leu Ser Arg Ala Gly Gly Ser Ile Ala Asp
 165 170 175

Phe Thr Gly His Arg Gln Thr Ala Phe Arg Glu Leu Glu Arg Val Leu
 180 185 190

Asn Phe Pro Gln Ser Asn Leu Cys Leu Lys Arg Glu Lys Gln Asp Glu
 195 200 205

Ser Cys Ser Leu Thr Gln Ala Leu Pro Ser Glu Leu Lys Val Ser Ala
 210 215 220

Asp Asn Val Ser Leu Thr Gly Ala Val Ser Leu Ala Ser Met Leu Thr
 225 230 235 240

Glu Ile Phe Leu Leu Gln Gln Ala Gln Gly Met Pro Glu Pro Gly Trp
 245 250 255

Gly Arg Ile Thr Asp Ser His Gln Trp Asn Thr Leu Leu Ser Leu His
 260 265 270

Asn Ala Gln Phe Tyr Leu Leu Gln Arg Thr Pro Glu Val Ala Arg Ser
 275 280 285

Arg Ala Thr Pro Leu Leu Asp Leu Ile Met Ala Ala Leu Thr Pro His
 290 295 300

Pro Pro Gln Lys Gln Ala Tyr Gly Val Thr Leu Pro Thr Ser Val Leu
305 310 315 320

Phe Ile Ala Gly His Asp Thr Asn Leu Ala Asn Leu Gly Gly Ala Leu
325 330 335

Glu Leu Asn Trp Thr Leu Pro Gly Gln Pro Asp Asn Thr Pro Pro Gly
340 345 350

Gly Glu Leu Val Phe Glu Arg Trp Arg Arg Leu Ser Asp Asn Ser Gln
355 360 365

Trp Ile Gln Val Ser Leu Val Phe Gln Thr Leu Gln Gln Met Arg Asp
370 375 380

Lys Thr Pro Leu Ser Leu Asn Thr Pro Pro Gly Glu Val Lys Leu Thr
385 390 395 400

Leu Ala Gly Cys Glu Glu Arg Asn Ala Gln Gly Met Cys Ser Leu Ala
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Arg Ser His His His His His His
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